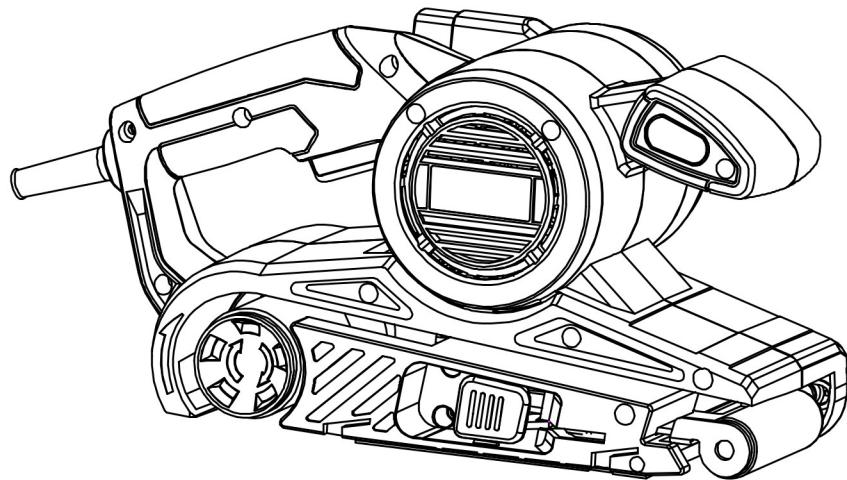




**3" x 21"
Belt Sander**



**Model # 6321
bit.ly/wenvideo**

IMPORTANT:

Your new tool has been engineered and manufactured to WEN's highest standards for dependability, ease of operation, and operator safety. When properly cared for, this product will supply you years of rugged, trouble-free performance. Pay close attention to the rules for safe operation, warnings, and cautions. If you use your tool properly and for intended purpose, you will enjoy years of safe, reliable service.

NEED HELP? CONTACT US!

Have product questions? Need technical support?
Please feel free to contact us at:



800-232-1195 (M-F 8AM-5PM CST)



techsupport@wenproducts.com



WENPRODUCTS.COM



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TECHNICAL DATA

Model Number:	6321
Motor:	120 V, 60 Hz, 7A
Speed:	820 feet per minute
Belt Size:	3" x 21"
Weight:	6 lbs

Contents: 3" x 21" Belt Sander, Dust Bag

GENERAL SAFETY RULES

Safety is a combination of common sense, staying alert and knowing how your item works. **SAVE THESE SAFETY INSTRUCTIONS.**



WARNING: To avoid mistakes and serious injury, do not plug in your tool until the following steps have been read and understood.

1. **READ** and become familiar with this entire instruction manual. **LEARN** the tool's applications, limitations, and possible hazards.
2. **AVOID DANGEROUS CONDITIONS.** Do not use power tools in wet or damp areas or expose them to rain. Keep work areas well lit.
3. **DO NOT** use power tools in the presence of flammable liquids or gases.
4. **ALWAYS** keep your work area clean, uncluttered, and well lit. **DO NOT** work on floor surfaces that are slippery with sawdust or wax.
5. **KEEP BYSTANDERS AT A SAFE DISTANCE** from the work area, especially when the tool is operating. **NEVER** allow children or pets near the tool.
6. **DO NOT FORCE THE TOOL** to do a job for which it was not designed.
7. **DRESS FOR SAFETY.** Do not wear loose clothing, gloves, neckties, or jewelry (rings, watches, etc.) when operating the tool. Inappropriate clothing and items can get caught in moving parts and draw you in. **ALWAYS** wear non-slip footwear and tie back long hair.
8. **WEAR A FACE MASK OR DUST MASK** to fight the dust produced by sawing operations.



WARNING: Dust generated from certain materials can be hazardous to your health. Always operate the tool in a well-ventilated area and provide for proper dust removal. Use dust collection systems whenever possible.

9. **ALWAYS** remove the power cord plug from the electrical outlet when making adjustments, changing parts, cleaning, or working on the tool.
10. **KEEP GUARDS IN PLACE AND IN WORKING ORDER.**
11. **AVOID ACCIDENTAL START-UPS.** Make sure the power switch is in the OFF position before plugging in the power cord.
12. **REMOVE ADJUSTMENT TOOLS.** Always make sure all adjustment tools are removed from the saw before turning it on.
13. **NEVER LEAVE A RUNNING TOOL UNATTENDED.** Turn the power switch to OFF. Do not leave the tool until it has come to a complete stop.

GENERAL SAFETY RULES

14. **NEVER STAND ON A TOOL.** Serious injury could result if the tool tips or is accidentally hit. DO NOT store anything above or near the tool.

15. **DO NOT OVERREACH.** Keep proper footing and balance at all times. Wear oil-resistant rubber-soled foot-wear. Keep the floor clear of oil, scrap, and other debris.

16. **MAINTAIN TOOLS PROPERLY.** ALWAYS keep tools clean and in good working order. Follow instructions for lubricating and changing accessories.

17. **CHECK FOR DAMAGED PARTS.** Check for alignment of moving parts, jamming, breakage, improper mounting, or any other conditions that may affect the tool's operation. Any part that is damaged should be properly repaired or replaced before use.

18. **MAKE THE WORKSHOP CHILDPREOF.** Use padlocks and master switches and **ALWAYS** remove start-er keys.

19. **DO NOT** operate the tool if you are under the influence of drugs, alcohol, or medication that may affect your ability to properly use the tool.

20. **USE SAFETY GOGGLES AT ALL TIMES** that comply with ANSI Z87.1. Normal safety glasses only have impact resistant lenses and are not designed for safety. Wear a face or dust mask when working in a dusty environment. Use ear protection such as plugs or muffs during extended periods of operation.

SPECIFIC RULES FOR THE SANDER



WARNING: Do not operate this tool until it is completely assembled and installed according to the instructions.

1. Wait for the belt to stop before setting the tool down. An exposed rotating belt may engage the surface, leading to possible loss of control and serious injury.

2. Hold the power tool by the insulated gripping surfaces only in case the belt contacts its own cord. Cutting a "live" wire may make exposed metal parts of the tool "live" and could give the operator an electric shock.

3. Secure the workpiece to a stable platform using clamps or another practical method. Holding the work by hand or against the body leaves is unstable and could lead to a loss of control.

4. Secure the material being sanded. Never hold it in your hand or across your legs. Small workpieces must be ad-equately secured so that the rotating belt doesn't pick them up during the forward motion of the sander. Unstable support causes the belt to bind, resulting in a loss of control and possible injury.

5. Always start the sander before the sanderpaper is in contact with the workpiece. Let the sander reach full speed before using the tool.

6. Check the workpiece for nails. If there are nails, either remove them or set them well below the intended finished surface so that they do not come in contact with the surface of the sander.

SPECIFIC RULES FOR THE SANDER

7. Unplug the tool before changing accessories. Accidental start-ups may occur if the tool is plugged in during an accessory change. Before plugging the tool back in, check that the trigger is OFF.
8. After changing sanderpaper, rotate the sanderpaper to make sure the sandpaper doesn't hit any part of the tool.
9. Always hold the tool firmly with both hands for maximum control.
10. Never pull the tool backwards over the workpiece. Loss of control may occur.
11. GFCI and personal protection devices such as electrician's rubber gloves and footwear will increase personal safety.
12. Keep handles and hands dry, clean and free from oil and grease. Slippery surfaces cannot safely maintain control of the power tool.
15. Develop a periodic maintenance schedule for your tool. When cleaning a tool be careful not to disassemble any portion of the tool. Internal wires may be misplaced or pinched and safety guard return springs may be improperly mounted.
16. Certain cleaning agents such as gasoline, carbon tetrachloride, ammonia, etc. may damage plastic parts.

ELECTRICAL INFORMATION

GROUNDING INSTRUCTIONS

IN THE EVENT OF A MALFUNCTION OR BREAKDOWN, grounding provides the path of least resistance for an electric current and reduces the risk of electric shock. This tool is equipped with an electric cord that has an equipment grounding conductor and a grounding plug. The plug **MUST** be plugged into a matching outlet that is properly installed and grounded in accordance with **ALL** local codes and ordinances.

DO NOT MODIFY THE PLUG PROVIDED. If it will not fit the outlet, have the proper outlet installed by a licensed electrician.

IMPROPER CONNECTION of the equipment grounding conductor can result in electric shock. The conductor with the green insulation (with or without yellow stripes) is the equipment grounding conductor. If repair or replacement of the electric cord or plug is necessary, **DO NOT** connect the equipment grounding conductor to a live terminal.

CHECK with a licensed electrician or service personnel if you do not completely understand the grounding instructions or whether the tool is properly grounded.

CAUTION: In all cases, make certain the outlet in question is properly grounded. If you are not sure, have a licensed electrician check the outlet.



WARNING: This tool is for indoor use only. Do not expose to rain or use in damp locations.

ELECTRICAL INFORMATION

GUIDELINES FOR USING EXTENSION CORDS

AMPERAGE	REQUIRED GAUGE FOR EXTENSION CORDS			
	25 ft.	50 ft.	100 ft.	150 ft.
7 A	18 gauge	16 gauge	14 gauge	12 gauge

Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. The table below shows the correct size to be used according to cord length and nameplate ampere rating. When in doubt, use a heavier cord. The smaller the gauge number, the heavier the cord.

Make sure your extension cord is properly wired and in good condition. Always replace a damaged extension cord or have it repaired by a qualified person before using it.

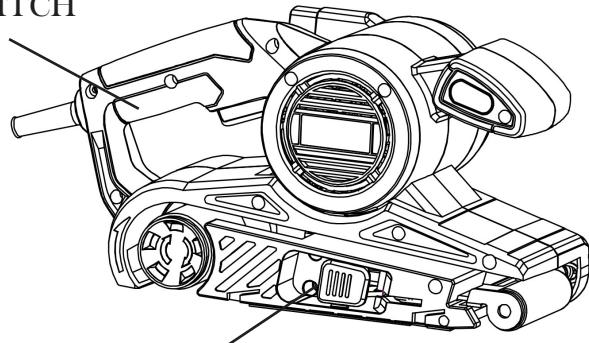
Protect your extension cords from sharp objects, excessive heat and damp/wet areas.

Use a separate electrical circuit for your tools. This circuit must not be less than a #12 wire and should be protected with a 15 A time-delayed fuse. Before connecting the motor to the power line, make sure the switch is in the OFF position and the electric current is rated the same as the current stamped on the motor nameplate. Running at a lower voltage will damage the motor.

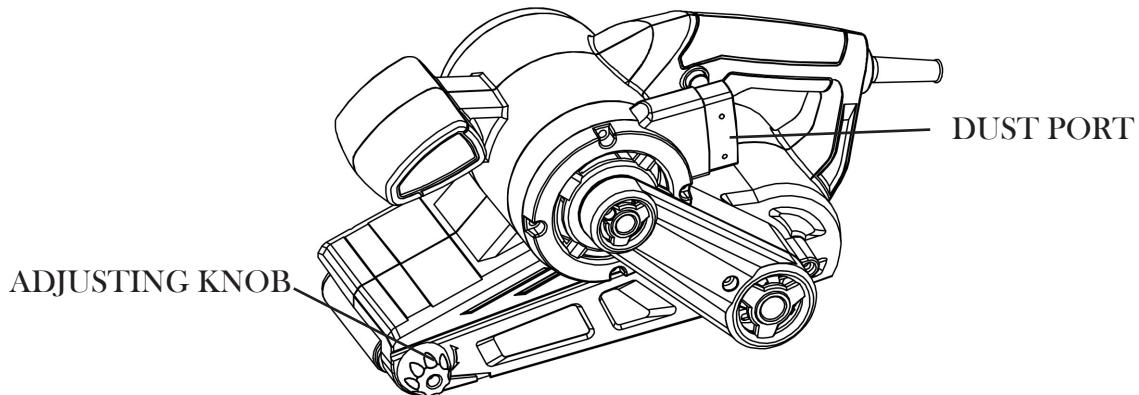
WARNING: This tool must be grounded while in use to protect the operator from electric shock.

KNOW YOUR SANDER

ON/OFF SWITCH



TENSION LEVER



DUST PORT

ASSEMBLY AND ADJUSTMENTS

REMOVING OR INSTALLING ABRASIVE BELT



WARNING: To avoid injury from accidental startups, turn switch OFF and remove the plug from the power source outlet before making any adjustments.

1. Turn the tool upside down and pull the tension lever (4) to retract the front roller and release the belt tension.

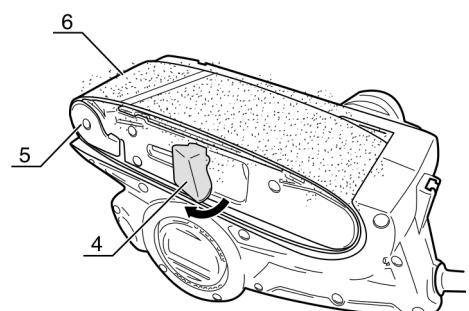
2. Slide the abrasive belt (6) off.

3. Mount a new abrasive belt.

CAUTION: Be sure that the arrow on the inside of the belt is pointing the same direction as that of the tool.

4. Push the tension lever down to the original position.

CAUTION: Ensure that your fingers are not trapped while adding tension back to the sander.

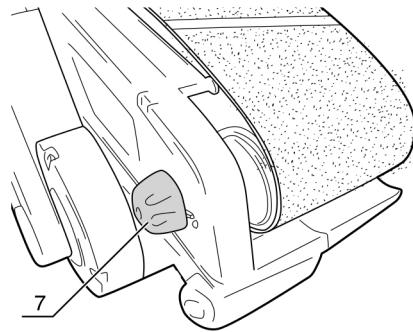


ASSEMBLY AND ADJUSTMENTS

ADJUSTING BELT TRACKING

The belt life will be increased by using the tracking adjustment.

1. Turn the tool upside down and hold it firmly with one hand. Then start the tool and observe the tracking of the sanding belt.
2. Stop the tool and adjust the tracking of the belt by rotating the adjusting knob (7) until the edge of the belt is even with the outer edges of both the front and rear rollers.



CAUTION: Check that the belt doesn't rub against the tool's frame.

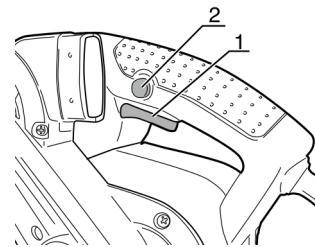
OPERATION

CAUTION: Never cover air vents since they must always be open for proper motor cooling.

CAUTION: Make sure that the work piece is free of nails and other foreign objects that could tear the abrasive belt.

SWITCH

This tool is started and stopped by squeezing and releasing the trigger (1). For continuous operation, press the lock-on button (2) while trigger is being squeezed. Squeeze trigger again to release the lock.

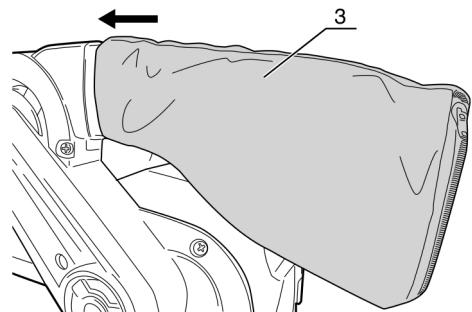


DUST BAG

When sanding wood, the dust bag should be used.

Although the dust bag has a substantial capacity, it should be emptied frequently. Opening the zipper of the dust bag allows complete cleaning.

CAUTION: When sanding metal, the dust bag should not be used, because of the risk of fire from flying sparks.

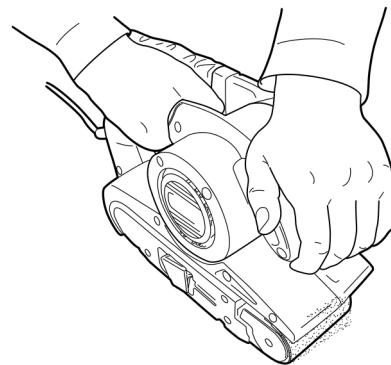


OPERATION

Hold the tool firmly with both hands. Turn the switch on and permit the rotation of the abrasive belt to reach full speed.

Then gently place the tool on the work piece surface. Move the tool back and forth. Never exert excessive pressure on the tool. The weight of the tool applies adequate pressure. Excessive pressure will retard the abrasive action, leave an uneven finish and cause extra wear to both the tool and the abrasive belt.

Always lift the tool off the work piece before turning the switch off.



MAINTENANCE

SERVICE: Preventive maintenance performed by unauthorized personnel may result in misplacing of internal wires and components, possibly causing a serious hazard. We recommend that all tool service be performed by an authorized WEN service station.

TOOL LUBRICATION: Your tool has been properly lubricated and is ready to use. It is recommended that tools with gears be regreased with a special gear lubricant at every brush change.

CARBON BRUSHES: The brushes in your tool have been engineered for many hours of dependable service. To maintain peak efficiency of the motor, we recommend examining the brushes every two to six months. Only genuine WEN replacement brushes designed specifically for your tool should be used.

CLEANING: Ventilation openings and switch levers must be kept clean and free of foreign matter. Do not attempt to clean these components by inserting pointed objects through openings.

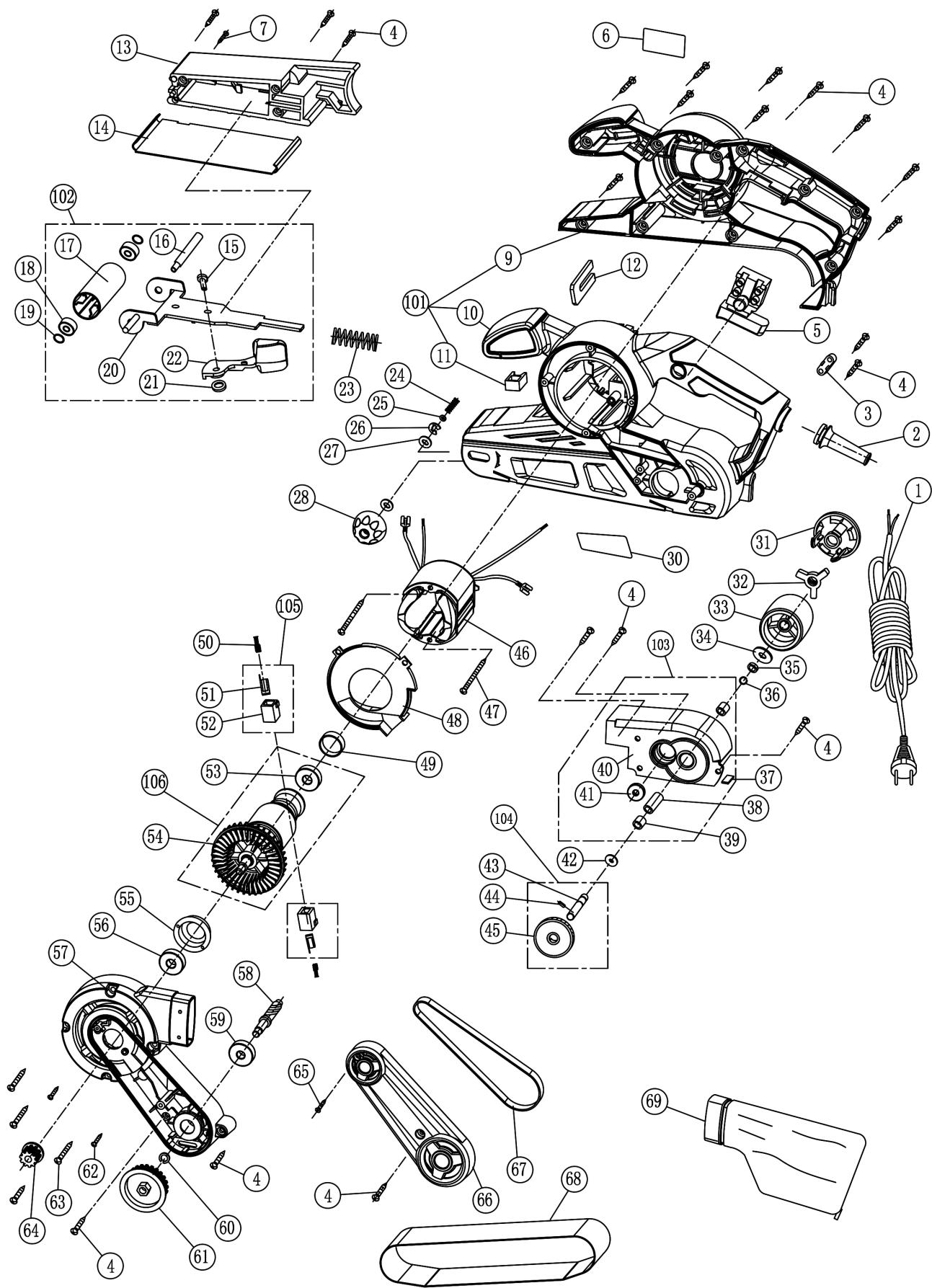


WARNING: To avoid accidents, always disconnect the tool from the power supply before cleaning or performing any maintenance. The tool may be cleaned most effectively with compressed dry air. Always wear safety goggles when cleaning tools with compressed air.



WARNING: Certain cleaning agents and solvents damage plastic parts. Some of these are: gasoline, carbon tetrachloride, chlorinated cleaning solvents, ammonia and household detergents that contain ammonia.

EXPLODED VIEW AND PARTS LIST



EXPLODED VIEW AND PARTS LIST

Item	Stock #	Description
1	6321-001	Power Cord
2	6321-002	Cord Protector
3	6321-003	Cord Clamp
4	6321-004	Screw
5	6321-005	Switch
6	6321-006	Label
7	6321-007	Screw
9	6321-009	Right Housing
10	6321-010	Centra Housing
11	6321-011	Ceramic Plate
12	6321-012	Support Block
13	6321-013	Clamp Device
14	6321-014	Base Plate
15	6321-015	Rivet 6
16	6321-016	Pin
17	6321-017	Roller
18	6321-018	Bearing 626-2Z
19	6321-019	Adjustment Washer 8
20	6321-020	Fork
21	6321-021	Wahser 6
22	6321-022	Spanner
23	6321-023	Big Spring
24	6321-024	Support Spring
25	6321-025	Retaining Ring
26	6321-026	Washer 7
27	6321-027	Washer 8
28	6321-028	Adjustment Knob
30	6321-030	Nameplate
31	6321-031	Rear Roller Cover
32	6321-032	Nut
33	6321-033	Drum Roller
34	6321-034	Wahser
35	6321-035	Washer
36	6321-036	Snap Ring 8
37	6321-037	Ceramic plate
38	6321-038	Locate Sleeve
39	6321-039	Needle Bearing

Item	Stock #	Description
40	6321-040	Aluminium Support
41	6321-041	Bearing 626-Z
42	6321-042	Adjustment Washer
43	6321-043	Driven Shaft
44	6321-044	Pin 3
45	6321-045	Big Gear
46	6321-046	Stator Assembly
47	6321-047	Screw
48	6321-048	Fan Baffle
49	6321-049	Washer
50	6321-050	Carbon Brush
51	6321-051	Brush Holder
52	6321-052	Brush Support
53	6321-053	Bearing 626-2Z
54	6321-054	Rotor
55	6321-055	Bearing Cover
56	6321-056	Bearing 608-2RS
57	6321-057	Left Housing
58	6321-058	Pinion Shaft Gear
59	6321-059	Bearing 627-2Z
60	6321-060	Washer 7
61	6321-061	Big Driving Gear
62	6321-062	Screw
63	6321-063	Screw
64	6321-064	Small Pulley
65	6321-065	Screw
66	6321-066	Belt Cover
67	6321-067	Drive Belt
68	6321-068	Sandpaper
69	6321-069	Dust Bag
101	6321-101	Housing Assembly
102	6321-102	Fork Assembly
103	6321-103	Support Assembly
104	6321-104	Shaft Assembly
105	6321-105	Brush assembly
106	6321-106	Rotor Assembly

LIMITED TWO YEAR WARRANTY

WEN Products is committed to building tools that are dependable for years. Our warranties are consistent with this commitment and our dedication to quality.

LIMITED WARRANTY OF WEN CONSUMER POWER TOOLS PRODUCTS FOR HOME USE

GREAT LAKES TECHNOLOGIES, LLC (“Seller”) warrants to the original purchaser only, that all WEN consumer power tools will be free from defects in material or workmanship for a period of two (2) years from date of purchase. Ninety days for all WEN products, if the tool is used for professional use.

SELLER'S SOLE OBLIGATION AND YOUR EXCLUSIVE REMEDY under this Limited Warranty and, to the extent permitted by law, any warranty or condition implied by law, shall be the repair or replacement of parts, without charge, which are defective in material or workmanship and which have not been misused, carelessly handled, or misrepaired by persons other than Seller or Authorized Service Center. To make a claim under this Limited Warranty, you must make sure to keep a copy of your proof of purchase that clearly defines the Date of Purchase (month and year) and the Place of Purchase. Place of purchase must be a direct vendor of Great Lakes Technologies, LLC. Third party vendors such as garage sales, pawn shops, resale shops, or any other secondhand merchant void the warranty included with this product. Contact techsupport@wenproducts.com or 1-800-232-1195 to make arrangements for repairs and transportation.

When returning a product for warranty service, the shipping charges must be prepaid by the purchaser. The product must be shipped in its original container (or an equivalent), properly packed to withstand the hazards of shipment. The product must be fully insured with a copy of the warranty card and/or the proof of purchase enclosed. There must also be a description of the problem in order to help our repairs department diagnose and fix the issue. Repairs will be made and the product will be returned and shipped back to the purchaser at no charge.

THIS LIMITED WARRANTY DOES NOT APPLY TO ACCESSORY ITEMS THAT WEAR OUT FROM REGULAR USAGE OVER TIME INCLUDING BELTS, BRUSHES, BLADES, ETC.

ANY IMPLIED WARRANTIES SHALL BE LIMITED IN DURATION TO TWO (2) YEARS FROM DATE OF PURCHASE. SOME STATES IN THE U.S., SOME CANADIAN PROVINCES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

IN NO EVENT SHALL SELLER BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING BUT NOT LIMITED TO LIABILITY FOR LOSS OF PROFITS) ARISING FROM THE SALE OR USE OF THIS PRODUCT. SOME STATES IN THE U.S. AND SOME CANADIAN PROVINCES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE IN THE U.S., PROVINCE TO PROVINCE IN CANADA AND FROM COUNTRY TO COUNTRY.

THIS LIMITED WARRANTY APPLIES ONLY TO PORTABLE ELECTRIC TOOLS, BENCH POWER TOOLS, OUTDOOR POWER EQUIPMENT AND PNEUMATIC TOOLS SOLD WITHIN THE UNITED STATES OF AMERICA, CANADA AND THE COMMONWEALTH OF PUERTO RICO. FOR WARRANTY COVERAGE WITHIN OTHER COUNTRIES, CONTACT THE WEN CUSTOMER SUPPORT LINE.